SMARTer® RACE 5’/3’ Kit Components

Catalog Nos.  
634860 (Not sold separately)  
Sold as a part of 634858 & 634859

Amount  
10 rxns

Lot Number  
Specified on product label.

Description
The SMARTer RACE 5’/3’ Kit Components allow the synthesis of first-strand cDNA from polyA+ or total RNA via SMART® (Switching Mechanism at 5’ End of RNA Template) technology, and facilitate the performance of 5’- and 3’-RACE (Rapid Amplification of cDNA Ends) PCR by means of the kit’s Universal Primer Mix. When used as a part of the full SMARTer RACE 5’/3’ Kit (Cat. Nos. 634858 & 634859), RACE PCR products can be amplified with SeqAmp™ DNA Polymerase, and cloned into the linearized pRACE vector with an In-Fusion® HD Cloning kit. Gene specific RACE primers are supplied by the user.

Package Contents
Box 1
- 10 µl SMARTer II A Oligonucleotide (24 µM)
- 5 µl Control Mouse Heart Total RNA (1 µg/µl)

Box 2
- 10 µl 3’ RACE CDS Primer A (12 µM)
- 10 µl 5’ RACE CDS Primer A (12 µM)
- 10 µl 10X Random Primer Mix (20 µM)
- 40 µl 5X First-Strand Buffer
- 10 µl dNTP mix (20 mM)
- 5 µl Dithiothreitol (100 mM)
- 1 ml Deionized H2O
- 2 tubes Tricine-EDTA Buffer (1 ml each)
- 20 µl SMARTScribe™ Reverse Transcriptase (100 U/µl)
- 10 µl RNase Inhibitor (40 U/µl)
- 400 µl 10X Universal Primer A Mix (UPM)
- 25 µl Control 5’-RACE TFR Primer (10 µM)
- 25 µl Control 3’-RACE TFR Primer (10 µM)
- 50 µl Universal Primer Short (10 µM)
- 20 µl Linearized pRACE (50 ng/µl)

Storage Conditions
- Store Box 1 at –70°C
- Store Box 2 at –20°C
Certificate of Analysis

SMARTer RACE 5'/3' Kit Components (Not sold separately)  

Expiration Date
- Specified on product label.

Shipping Conditions
- Box 1: Dry ice (–70°C)
- Box 2: Dry ice (–70°C)

Product Documents
Documents for our products are available for download at takarabio.com/manuals
The following documents apply to this product:
- SMARTer RACE 5'/3' Kit User Manual
- SMARTer RACE 5'/3' Kit Protocol-at-a-Glance
- Linearized pRACE Vector Information

Quality Control Data
A sample kit from each lot of SMARTer RACE 5'/3' Kit Components was tested to ensure quality and performance. 50 ng and 10 ng of Control Mouse Heart Total RNA was used as a template for first-strand cDNA synthesis. The resulting first-strand cDNA was then used—along with the Universal Primer Mix, the positive control TFR Primers, and SeqAmp DNA Polymerase—in separate 5'- and 3'-RACE reactions that produced the expected 2.1 kb 5' RACE product and 3.1 kb 3' RACE product, respectively. The linearized pRACE vector was tested with a control RACE PCR fragment via In-Fusion HD cloning, and yielded >500 colonies at a transformation efficiency of >5 x 10⁸ cfu/µg.

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department.
SMARTer® RACE 5’/3’ Kit Components

CATALOG NO.
634860

NOTICE TO PURCHASER:

Our products are to be used for Research Use Only. They may not be used for any other purpose, including, but not limited to, use in humans, therapeutic or diagnostic use, or commercial use of any kind. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without our prior written approval.

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